

10/798,172

1-16. (CANCELED)

17. (NEW) A drive train for a mobile vehicle comprising:

a drive engine (1) for driving both a shiftable step-down transmission (5), for driving a propulsion drive, and an auxiliary drive (6), for driving a hydraulic pump (7) of a working hydraulic system;

a hydrodynamic torque converter coupling the drive engine (1) to the shiftable step-down transmission (5) and a converter bridging clutch (2) releasably coupling a pump impeller (3) of the hydrodynamic torque converter to the drive engine (1); and

an electronic control unit (10) for receiving a signal from a selector lever (8) and controlling operation of the working hydraulic system and receiving a signal from a driving pedal (11) and controlling operation of the propulsion drive, and the electronic control unit (10) controlling the drive engine (1) and the clutch (2) to establish a driving speed of the propulsion drive and a speed of the auxiliary drive (6) dependent upon positions of the driving pedal (11) and the selector lever (8); and

when the drive engine (1) is operating at maximum power, the clutch (2) is engaged and the selector lever (8) is then actuated, the clutch (2) is actuated in a disengaging direction and the drive engine (1) is regulated so that the auxiliary drive (6) reaches a defined speed and a driving speed of the propulsion drive is reduced as the driving resistance increases.

18. (NEW) A method for controlling a drive train of a mobile vehicle having a drive engine (1) driving both a shiftable step-down transmission (5), via a hydrodynamic torque converter, and an auxiliary drive (6), for powering a hydraulic pump (7) for a working hydraulic system, and a converter bridging clutch (2) releaseably engages a pump impeller (3) of the hydrodynamic torque converter with the drive engine (1) for driving a propulsion drive, the method comprising the steps of:

sending a signal from a selector lever (8), for controlling operation of the working hydraulic system, and a signal from a driving pedal (11), for controlling a speed of the propulsion drive, to an electronic control unit (10);

controlling the drive engine (1) and the clutch (2), via the electronic control unit (10), to establish a driving speed of the propulsion drive and a speed of the auxiliary drive (6) dependent upon positions of the driving pedal (11) and the selector lever (8); and

10/19/05 - 1:02 PM

10/798,172

when the drive engine (1) is operating at maximum power, the clutch (2) is engaged and the selector lever (8) is actuated, actuating the clutch (2) in a disengaging direction and regulating the drive engine (1) so that the auxiliary drive (6) reaches a defined speed and a driving speed of the propulsion drive is reduced as the driving resistance increases.

19. (NEW) The method for controlling the drive train according to claim 18, further comprising the step of, when the selector lever (8) is actuated and the clutch (2) is engaged, actuating the clutch (2) in a disengaging direction a sufficiently amount in order for the auxiliary drive (6) to reach a defined speed.

20. (NEW) The method for controlling the drive train according to claim 18, further comprising the step of, when the drive engine (1) is operating below a maximum power and the clutch (2) is engaged and the selector lever (8) is then actuated, actuating the clutch (2) in a disengaging direction and regulating the drive engine (1) such that the auxiliary drive (6) reaches a defined speed and the driving speed corresponds to a speed specified by a position of the driving pedal (11).

21. (NEW) The method for controlling the drive train according to claim 18, further comprising the step of, when the selector lever (8) is actuated and the driving pedal (11) is actuated in a direction of lower speed, increasing a speed of the drive engine (1).

22. (NEW) The method for controlling the drive train according to claim 18, further comprising the step of reducing a driving speed of the propulsion drive by actuating a service brake (12).

23. (NEW) The method for controlling the drive train according to claim 18, further comprising the step of, when the selector lever (8) is actuated and the driving pedal (11) is actuated in a direction of higher speed, increasing a speed of the auxiliary drive (6) and shifting the shiftable step-down transmission (5) in a direction of a higher transmission ratio.

24. (NEW) A method for controlling a drive train of a mobile vehicle having a drive engine (1) driving both a shiftable step-down transmission (5), via a hydrodynamic torque converter, and directly driving an auxiliary drive (6), for powering a hydraulic pump (7) for a working hydraulic system, and a converter bridging clutch (2) releasably engages a pump impeller (3) of the hydrodynamic torque converter with the drive engine (1) for driving a propulsion drive, the method comprising the steps of:

10/19/2005 4:23 PM

10/798,172

sending a signal from a selector lever (8), for controlling operation of the working hydraulic system, and a signal from a driving pedal (11), for controlling a speed of the propulsion drive, to an electronic control unit (10);

controlling the drive engine (1) and the clutch (2), via the electronic control unit (10), to establish a driving speed of the propulsion drive and a speed of the auxiliary drive (6) dependent upon positions of the driving pedal (11) and the selector lever (8); and

when the drive engine (1) is operating at maximum power, the clutch (2) is engaged and the selector lever (8) is actuated, actuating the clutch (2) in a disengaging direction and regulating the drive engine (1) so that the auxiliary drive (6) reaches a defined speed and a driving speed of the propulsion drive is reduced as the driving resistance increases.